## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Richard Bates	)
Serial No.: 10/534,147	))
U.S. National Phase Filed: December 15, 2005	))
For: EXCAVATING AND LOADING MACHINE	)))
Group Art Unit: 3652	)
Examiner: Donald W. Underwood	)

## DECLARATION OF SIMON JOHN RATCLIFFE UNDER 37 C.F.R.§ 1.132

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

## Sir:

- 1. I, Simon John Ratcliffe declare that I have reviewed the disclosure and the claims of the above-identified patent application and that I am familiar with the subject matter disclosed therein.
- 2. I have earned a Higher National Diploma in Agricultural Engineering from Harper Adams University College, Shropshire in England, and I am a member of the Institute of Agricultural Engineering. I have worked in this environment for 22 years.
- 3. I am currently employed as the Chief Engineer of the Backhoe Loader Division of J.C.Bamford Excavators Limited.
- 4. I submit this declaration to address issues raised in the office action dated November 02, 2007, in the above-identified patent application. One issue is the teaching of U.S. Patent No. 5,265,995 ("Beck") cited by the Examiner.

- 5. I have reviewed the Beck reference and have observed that Beck does not teach or relate to an excavating and loading machine having a rotatable cab that rotates less than 360°, as in the claimed invention. The office action states that "[t]he examiner agrees that Beck provides a machine that rotates the cab 360 degrees." Office Action, p. 2, paragraph 6. However, the implication that Beck also discloses rotation of the cab less than 360° because "Beck indicates that not all vehicles do this [rotate 360°]" is a mischaracterization of Beck. Beck discloses a variety of earth moving machines that are each used for a special purpose. Beck gives examples of wheeled loaders, with cabs that do not rotate, on the one hand, and excavators, with cabs that rotate a full 360° or more, on the other hand, and notes that "each of these machines is limited to operate in a certain manner . . . . " Beck, col. 1, lines 38-39. Beck discloses a construction machine that combines a wheeled loader and excavator. Like a conventional excavator, the Beck machine offers a cab that rotates through a full range of 360°. Beck does disclose machines having cabs with full 360° rotation, and discloses machines having non-rotatable cabs. However, Beck does not disclose a machine having a rotatable cab, which limits cab rotation to less than 360°. Accordingly, one of ordinary skill in the art would not recognize Beck as standing for the proposition that a combined excavating and loading construction machine can have a rotatable cab that rotates less than 360°.
- 6. Furthermore, the machine of Beck has sensor mechanisms designed to intercept the backhoe if it is rotated forwardly with its boom, dipperstick, and bucket in a manner that would cause a collision with the front end loader assembly and/or the engine enclosure. Those of ordinary skill in the art would not recognize the need or benefit of adding the claimed stops to Beck because the sensor mechanisms sufficiently protect the machine from collision with the rotating backhoe without permanently preventing the full 360° range of cab rotation.
- 7. The primary object of Beck is "to provide an improved construction machinery vehicle that combines a front end loader attachment with a backhoe attachment connected to a cab that rotates a complete revolution of three hundred sixty degrees." One of ordinary skill in the art would not be motivated to modify Beck to include stops to *prevent* full 360° cab rotation, when the stated purpose of Beck is to specifically *allow* full 360° cab rotation.

- 8. Moreover, the invention for the Excavating and Loading Machine as disclosed in the subject patent application arose from a long standing need that existed in the construction industry to have a combined excavating and loading machine capable of excavating a trench close to an obstacle without obstructing the operator's visibility. Prior to the Excavating and Loading Machine disclosed and claimed in the present application this long standing need had not been met.
- 9. Conventional machines that perform both excavating and loading operations tend to be inferior to dedicated excavating machines due to design compromises made when combining the excavating and loading equipment into a single machine. Particularly, the body and wheeled ground engaging structure of the combined excavating and loading machine tends to interfere with excavating a trench close to an obstacle, such as a wall. Some prior art machines attempted to resolve this problem by mounting the excavator arm on a carriage extending side to side. Although this arrangement did allow excavating a trench closer to the obstacle, the side to side movement of the carriage and arm obstructs the operator's view. The obstruction of the operator's view renders these machines inferior to the claimed invention.
- 10. The Excavating and Loading Machine of the claimed invention solves this problem and fulfills a long standing need in the industry by providing an excavating arm that is movable together with the cab to enable excavating operations to be carried out in a wide variety of positions, without having to move the excavating arm along a carriage to a position where the operator's visibility may be obstructed.
- 11. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application involved or any patent issuing thereon.

Dated: 3/7/08

Simon John Ruteff